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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/701,864

11/05/2003

Yong Wang

200312367-1

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08/07/2006

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EXAMINER

NGHIEM, MICHAEL P

ART UNIT

PAPER NUMBER

2863

DATE MAILED: 08/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/701,864

Applicant(s)

WANG ET AL.

Examiner

Michael P. Nghiem

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10,12,13 and 16-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10,12,13 and 16-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The Amendment filed on July 27, 2006 has been acknowledged.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 27, 2006 has been entered.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-10, 12, 13, and 16-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims do not produce any tangible results. The practical application of the claimed invention cannot be realized until the information determined is conveyed to the user. For the result to be tangible, the computed S-parameters would need to be outputted to a user or displayed to a user or stored for later use by a user. Hence, the claims are treated as non-statutory functional descriptive material (see MPEP 2106 and <http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm>).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321 may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3, 5-9, and 16-27 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 5-10, 15, 18, 19, 21, 22, 25-27, 29, and 30 of U.S. Patent No. 6,998,833 (Wang et al.). Although the

conflicting claims are not identical, they are not patentably distinct from each other because Wang et al. anticipates the claimed invention:

"A system and method for determining S-parameters of a network (claim 1; claim 15; claim 21; claim 29; claim 30), comprising:

- an S-parameter calculator (claim 1, line 3; claim 15, line 9; claim 21, line 9; claim 29, line 9; claim 30, line 9) that computes the S-parameters of the network based on waveform parameters determined based on single port measurements (claim 1, lines 3-5; claim 15, lines 9-13; claim 21, lines 9-11; claim 29, lines 9-11; claim 30, lines 9-11) implemented at each of plural ports of the network (claim 1, lines 5-7; claim 15, lines 9-13; claim 21, lines 9-11; claim 29, lines 9-11; claim 30, lines 9-11), each of the single port measurements being a measurement at one port of the network while each of the other plural ports are not measured (single port measurements, each port is deemed to be measured while the other ports are not measured);

- the waveform parameters comprise information related to at least one of a transmission and a reflection of a signal provided at the single port (claim 2; claim 15, line 4; claim 22, line 3; claim 30, line 3);

- the S-parameter calculator determines reflection coefficients based on the waveform parameters, the S-parameter calculator determining the S-parameters based on the reflection coefficients (claim 3; claim 15, lines 9-13; claim 22);

- the network is a two-port network comprising first and second ports, the single port measurements (claims 5, 25) comprising measurements implemented at at least three of:

- the first port while the second port is open (claim 5, lines 7-8; claim 25, lines 6-7);
- the first port while the second port is shorted (claim 5, lines 7-8; claim 25, lines 6-7);
- the second port while the first port is open (claim 5, lines 11-12; claim 25, lines 10-11);
- the second port while the first port is shorted (claim 5, lines 11-12; claim 25, lines 10-11);
- the S-parameter calculator determines reflection coefficients based on waveform parameters (claims 6, 25), the reflection coefficients comprising at least three of:
 - a first reflection coefficient of a first port while each of the other plural ports is open (claim 6);
 - a second reflection coefficient of the first port while each of the other plural ports is shorted (claim 6; claim 25, lines 7-8);
 - a third reflection coefficient of a second port while each of the other plural ports is open (claim 6; claim 25, lines 9-10);
 - a fourth reflection coefficient of the second port while each of the other plural ports is shorted (claim 6; claim 25, lines 11-12);
- the S-parameter calculator computes the S-parameters of the network based on a subset of less than all possible reflection coefficients for the network (claim 7);
- a network analyzer for performing the single port measurements (claim 8);

- the network is a passive multi-port network (claim 9);
- means for selecting a set of the reflection coefficients to be implemented by the determining means (claims 10, 18);
- the computing means comprises means for determining plural sets of the S-parameters for the network based on different respective sets of the reflection coefficients (claims 19, 26);
- the computing means comprises means for averaging determined S-parameters for at least some of the plural sets of S-parameters (claims 20, 27)."

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.


Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (571) 272-2277. The examiner can normally be reached on M-H.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Art Unit: 2863

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MICHAEL NGHIEM
PRIMARY EXAMINER

Michael Nghiem

August 2, 2006